Application No.:

10/712,087

Amendment Dated:

April 23, 2007

Reply to Office Action of: January 22, 2007

SNK-3750US3 (Formerly YAO-3750US3)

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims**:

- 1-77. (Cancelled).
- 78. (Currently Amended) A laser light source, comprising:
- a distributed feedback type semiconductor laser for emitting laser light;
- a semiconductor laser amplifier for amplifying the laser light; and

an optical wavelength conversion element for receiving the amplified laser light so as to generate a harmonic wave, the optical wavelength conversion element having periodic domain inverted structures,

wherein the optical wavelength conversion element is formed of a stable proton exchange layer whose refractive index does not vary with time during operation, the stable proton exchange layer is configured to prevent a temporal variation in the refractive index when a pseudo-phase matching condition of the stable proton exchange layer is satisfied.

- 79. (Previously Presented) A laser light source according to claim 78, wherein the optical wavelength conversion element has a modulation function.
- (Previously Presented) A laser light source according to claim 78, 80. wherein the optical wavelength conversion element is formed in an LiNb<sub>x</sub>Ta<sub>1-x</sub>O<sub>3</sub> ( $0 \le X$  $\leq$  1) substrate.
  - (Cancelled). 81.
  - 82. (Previously Presented) A laser light source according to claim 78,

wherein an optical waveguide is formed on the optical wavelength conversion element, and

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wherein a width and a thickness of the optical waveguide are each 40  $\mu m$  or greater.

- 83. (Previously Presented) A laser light source according to claim 82, wherein the optical wavelength conversion element has a modulation function.
- 84. (Previously Presented) A laser light source according to claim 82, wherein the optical wavelength conversion element is formed in an LiNb<sub>x</sub>Ta<sub>1-x</sub>O<sub>3</sub> (0  $\leq$  X  $\leq$  1) substrate.
- 85. (Previously Presented) A laser light source according to claim 82, wherein the optical waveguide is of a graded type.
  - 86-87. (Cancelled).